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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,518	07/05/2001	Gennadiy G. Kolomeyer	07050.0009U1	9909

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EXAMINER

BROWN, JENNINE M

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 02/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/899,518

Applicant(s)

KOLOMEYER ET AL.

Examiner

Jennine M. Brown

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 5-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☒ Interview Summary (PTO-413) Paper No(s). 10.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

Finality

Based on the Interview Summary, Applicants request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Election/Restrictions

Applicant's election with traverse of claims 1-4 in Paper No. 8 is acknowledged.

The traversal is on the grounds that the Examiner has not shown a serious burden would be required to examine all the claims, irrespective of whether the groups requested are independent and distinct inventions. This is not found persuasive because 37 CFR 1.142 states "for purposes of the initial requirement, a serious burden on the examiner may be prima facie shown if the examiner shows by appropriate explanation of separate classification, or separate status in the art, or a different field of search as defined in MPEP § 808.02." A prima facie burden has been shown by separate classification as presented previously in the Detailed Action of 06/20/2003.

The requirement is still deemed proper and is therefore made FINAL.

This application contains claims 5-29 drawn to an invention nonelected with traverse in Paper No. 8. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112

Examiner has withdrawn the previous rejection.

Specification

Examiner has entered Applicants amendment of the abstract, which obviates Examiners previous rejection, therefore this rejection has been withdrawn.

Claim Rejections - 35 USC § 102

The examiner has dropped the 102 rejection because the specific amount of phenolic activator claimed by applicants has not been disclosed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hofmann, et al (US 6093793).

The inventive concept of this application for example as set forth in claim 1 is a catalyst composition comprising a primary catalyst and a phenolic activator.

Hoffman discloses catalyst compositions comprising a primary catalyst, phenolic activator, substantially as claimed herein. (col. 3, l. 1-40 – e.g. perfluoroalkylsulfonates, bisphenol A)

Hoffman differs from the claimed invention in the failure to disclose the claimed amount of activator.

The claims would have been obvious however, because although Hoffman is desirous of producing a different product from that produced by applicants, the production of allylic alcohols is specifically disclosed as a side reaction. Accordingly, the skilled artisan desirous of producing allylic alcohols would have been more than capable of selecting and modifying the amount of promoter to maximize the side reaction. See for example column 1, lines 14-28, which states, "Polyaddition of epoxides onto starter compounds is conventionally performed industrially by alkali metal catalysis. The predominantly used alkali metal catalysts are alkali metal hydroxides. Disadvantages of

alkali metal hydroxide catalysed polyether polyol production are primarily the elaborate working up of the product due to neutralization of the alkaline polymer ... and the base-catalysed rearrangement of epoxides, for example propylene oxide, which proceeds as a secondary reaction, to yield allyl or propenyl alcohols, which give rise to monofunctional polyethers having a terminal double bond, which are known as monools." Because excess base will catalyze the epoxide rearrangement, it teaches the presence of certain accelerators can be disadvantageous and it is known that using accelerators will produce more of the undesirable side reaction (col. 3, l. 3-10).

Response to Arguments

Applicant's arguments filed 09/09/2003 have been fully considered. Examiner has modified the rejection because Hoffman fails to disclose the claimed amount of activator.

1. Although used for a materially different process, the catalyst as claimed is taught by Hofmann, et al. as described above. Applicants disclosure states that the allyl alcohol is an intermediate used in the process of alpha beta unsaturated carbonyl compounds when oxidized and can be performed simultaneously as a parallel independent processes (specification p. 12, l. 12-15). This intermediary step is analogous to the side reaction of allylic alcohol to form propenyl alcohol, which is further reduced to make polyether polyols and disclosed in the Hofmann reference above.

2. The argumentation for Hofmann disclosing the potential for certain accelerators for low molecular weight cyclic ethers is flawed since cyclic ethers are also known as epoxides or oximes which are reacted with the catalyst and are capable of making allylic alcohols by favoring the side reaction rather than the primary reaction. Because the allylic alcohol side reaction is known although not desired in the process described by Hofmann, the catalytic compositions are equivalent and would imply that one could make the allylic alcohols through a process favoring the side reaction. The catalyst does not exclude any catalyst capable of making a different product through a materially different process, only allows for there to be one or more primary catalyst and one or more activator/modifier compounds.

3. Lastly, if the phenolic activator/modifier is part of the catalyst system as argued, it would also be able to be separately recoverable from the products obtained which is not the case as is seen in the examples given in Applicant's specification (Examples 58, 63-64), therefore the activator/modifier is not truly a catalyst component, merely a reactant that is added in minute amounts to the catalyst to produce the allylic alcohol. The addition of more zinc octoate (3 parts) and cyclohexanone (190 parts) in the system could change the reaction from catalytic to non catalytic. Ketones can be converted to the appropriate alcohol and/or have ring opening metathesis based on acid or base catalysis therefore the phenolic compound may not truly be the activator/modifier instead it may be a ketone mediated activator/modifier.

Relevant Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

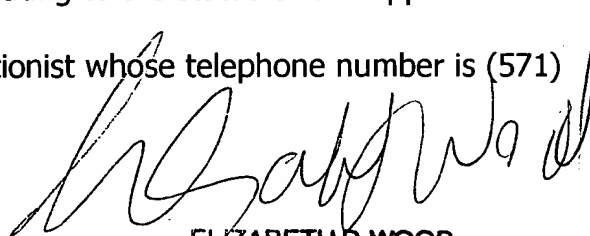
WO 95/25079 teaches a phenolic epoxide catalyzed by a dilithium catalyst (dilithiated (1R, 2S) norephedrine), which causes the enantioselective rearrangement of the epoxide to yield allylic alcohol through varied routes.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennine M. Brown whose telephone number is (571) 272-1364. The examiner can normally be reached on M-F 8:00 AM - 6:00 PM; first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on (571) 272-1362. The fax phone number for the examiner where this application or proceeding is assigned is (571) 273-1364.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1200.



ELIZABETH D. WOOD
PRIMARY EXAMINER

jmb